



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,864	07/06/2000	KAZUHIKO TAKAHATA	2000-0956A	4446
7590 09/03/2004				
WENDEROTH LIND PONACK 2033 K STREET NW SUITE 800 WASHINGTON, DC 20006				
			EXAMINER AKKAPEDDI, PRASAD R	
			ART UNIT 2871	PAPER NUMBER

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/582,864

Applicant(s)

TAKAHATA ET AL.

Examiner

Prasad R Akkapeddi

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27-39 and 41-52 is/are pending in the application.
- 4a) Of the above claim(s) 28-39 and 45-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27 and 41-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 04/29/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 27, 41- 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawai et al. (Sawai) (U.S.Patent No. 6,020,945) in view of Okabe Minoru et al. (Minoru) (JP-07-105781).

a. As to claim 27: Sawai discloses a touch-input type liquid crystal display device with an upper polarizer (6), a lower polarizer (2), a transparent touch panel (12) disposed between the upper polarizer (6) and the lower polarizer (2), an upper optical phase difference film (7), an electrode portion (ITO film), a stationary electrode portion (ITO film) and a lower optical phase difference film (11) and a liquid crystal display (1), wherein a space is interposed between the upper optical phase difference film (7) and the lower optical phase difference film (11), the transparent touch panel is disposed between the upper polarizer and the liquid crystal display (Fig. 9), the upper and lower optical phase difference film is capable of providing a  $1/4$  wavelength phase delay to light, incident thereon, having a center wavelength within a visible region (550 nm) (col. 7, lines 9-16) and (col. 8, line 3).

In Fig. 2, Sawai also discloses the various angles such as an angle formed by an optical axis of the upper optical phase difference film (7) and a polarization axis of the upper polarizer (6) is about  $45^\circ$  and an angle formed by an optical axis of the lower optical phase difference film (11) and linearly polarized light to be outputted from the liquid crystal display (1) is about  $45^\circ$  and an angle formed by the optical axis of the upper optical phase difference film and the optical axis of the lower optical phase difference film is about  $90^\circ$  (col. 7,

lines 28-29), and an angle formed by the polarization axis of the upper polarizer (6) and linearly polarized light to be outputted from the liquid crystal display is about 90 ° (Fig. 2). In Fig. 14, Sawai discloses that the liquid crystal display is disposed between the transparent touch panel and the lower polarizer (140).

Sawai does not explicitly state a movable electrode portion on a lower surface of the upper phase difference film. However, Sawai discloses an ITO film as an electrode on the lower portion of the upper phase difference film (7) which is a part of the touch panel.

Since the device is a touch panel and the ITO film is rather flexible that can move under pressure. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the ITO film as a movable electrode because of the thinness of the structure and such a function is inherent.

As to the newly added limitation in claim 27: As the applicant has pointed out, Sawai's adhesive layer (PET film 4) is on the movable electrode side portion and not on the member where the stationary (bottom) electrode portion has been formed.

Minoru in disclosing a transparent touch panel discloses a structure (4) on top of a liquid crystal display (3) having a front and rear substrates (5a and 5b) and ITO electrodes (page 6, paragraph 0010). A member (8) (referred to as surface base material) and an acrylic binder (7) having adhesive property (page

6, paragraph 0012) is directly formed on the base member (8) (see drawing 3), as recited in the instant claim 27.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the adhesive layer as disclosed by Minoru to the display device of Sawai to prolong the life of the touch panel and to provide good visible properties to the liquid crystal display (abstract).

b. As to claims 41,42 and 44: Sawai also discloses a hard coating having low moisture permeability (Fig. 3), a PET film (a transparent adhesive layer) bonded to the ITO film and anti reflective coatings (col. 1, line 52).

3. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sawai in view of Minoru and further in view of Sugiyama et al. (Sugiyama) (U.S. Patent No. 5,498,657).

Sawai in view of Minoru does not disclose an antifouling processed layer.

Sugiyama in disclosing a fluorine containing polymer composition, discloses that such a composition could be used as an antifouling layer for devices such as touch-panels, liquid crystals etc. (col. 15, lines 37-59).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the polymer composition as disclosed by Sugiyama to the device of Sawai when modified by Minoru for improving mechanical properties, scratch resistance and creep resistance (col. 10, lines 60-67) and (col. 11, lines 1-5).

***Response to Arguments***

4. Applicant's arguments with respect to claim 27 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prasad R Akkapeddi whose telephone number is 571-272-2285. The examiner can normally be reached on 7:00AM to 5:30PM M-Th.

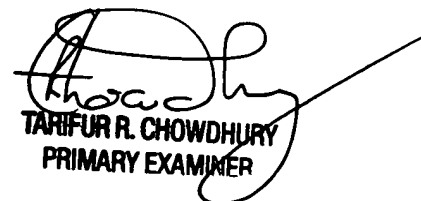
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

\*\*\*



Prasad R Akkapeddi, Ph.D  
Examiner  
Art Unit 2871



TARIFUR R. CHOWDHURY  
PRIMARY EXAMINER